

Claims:

- [0033]** 1. A tile substratum comprising a preformed, self-supporting article formed from a mixture that includes cement, expanded polystyrene and water.
- [0034]** 2. A tile substratum as defined in claim 1, wherein the cement comprises Portland cement.
- [0035]** 3. A tile substratum as defined in claim 1, wherein the mixture further includes fly ash.
- [0036]** 4. A tile substratum as defined in claim 1, wherein the expanded polystyrene comprises expanded polystyrene beads.
- [0037]** 5. A tile substratum as defined in claim 1, wherein the mixture further includes fibrous material.
- [0038]** 6. A tile substratum as defined in claim 1, wherein the mixture comprises Portland cement, expanded polystyrene, fly ash and fibrous material.
- [0039]** 7. A tile substratum as defined in claim 6, wherein the preformed, self supporting article comprises a cured article formed from a mixture having the following formulation: 14 cu feet of small expanded polystyrene beads, 230 pounds Portland cement, 70 pounds fly ash, 18 gallons water, and a selected amount of fiber reinforcement.
- [0040]** 8. A tile substratum as defined in claim 7, wherein the cured article has the following relative dimensions: 48 inches length, 25 inches wide and 1.5 inches thick.
- [0041]** 9. A tile substratum as defined in any of claims 1-8, further wherein the self-supporting, preformed member includes an expanded polystyrene foam backer.
- [0042]** 10. In combination, a countertop base and a preformed, self supporting article supported on the countertop base, the preformed, self supporting article comprising a mixture that includes cement, expanded polystyrene and water.
- [0043]** 11. The combination of claim 10, wherein the preformed, self-supporting article

has the composition of claim 7.

**[0044]** 12. The combination of claim 11, wherein the preformed, self-supporting article has the composition of claim 8.

**[0045]** 13. The combination of any of claims 10-12, wherein the preformed, self-supporting article is supported on the countertop base in a substantially horizontal orientation.

**[0046]** 14. The combination of claim 13, wherein one or more tiles are supported on the preformed, self-supporting article.